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LETTER TO THE EDITOR

The role of FEV_6 in the detection of airway obstruction

In the January 2005 issue of Respiratory Medicine, Dr. Demir and colleagues compare the performance of the FEV_1/FVC_6 with the FEV_1/FVC ratio in detecting airway obstruction.[1] Obstruction was defined using the Global Obstructive Lung Disease[2] (GOLD) criterion; that is, an FEV_1/FVC ratio less than 70%. The FEV_1/FVC_6 performed rather poorly in this comparison but this is to be expected when a fixed ratio is used. On average, FEV_6 will be less than FVC in people over age 40, and the average FEV_1/FVC_6 ratio will therefore be higher than the FEV_1/FVC ratio. The more appropriate comparison would have used an appropriate statistically defined lower limits of the healthy subject range. The only such equations currently available are those from the NHANES III study.[3]

Their large database would allow the authors to provide an estimate of a threshold for defining airway obstruction comparable to the GOLD criteria but based on FEV_1/FVC_6. Even as I say this, I want to stress that using a fixed ratio (even that recommended by GOLD) results in misclassifications compared to more traditional lower limits of normal and that those misclassifications occur more frequently in healthy elderly individuals.[4]

References

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